CLAIMS

1. A process for the production of conjugated linoleic acid, in which

(a) conjugated linoleic acid lower alkyl esters are hydrolyzed with water in the presence of enzymes with continuous removal of alcohol,

(b) the hydrolyzate is separated into an organic phase and an aqueous/alcoholic phase and

(c) the organic phase containing the conjugated linoleic acid is freed from unreacted conjugated linoleic acid lower alkyl esters.

2. A process as claimed in claim 1, characterized in that conjugated linoleic acid lower alkyl esters corresponding to formula (I):

$R^1CO\text{-}OR^2$ (I)

where R^1CO is the acyl group of a linoleic acid containing conjugated double bonds and R^2 is a linear or branched alkyl group containing 1 to 4 carbon atoms,
are used.

3. A process as claimed in claims 1 and/or 2, characterized in that the hydrolysis is carried out with lipases and/or esterases in free or immobilized form.

4. A process as claimed in at least one of claims 1 to 3, characterized in that the hydrolysis is carried out with lipases and/or esterases selected from the group of microorganisms consisting of *Alcaligenes., Aspergillus niger, Candida antarctica A, Candida antarctica B, Candida cylindracea, Chromobacterium viscosum, Rhizomucor miehei, Penicilium camemberti, Penicilium roqueforti, Porcine pancreas, Pseudomonas cepacia, Pseudomonas fluorescens, Rhizopus javanicus, Rhizopus oryzae, Thermomyces lanugenosus*.

5. A process as claimed in at least one of claims 1 to 4, characterized in that the hydrolysis is carried out at temperatures in the range from 20 to 80°C.

6. A process as claimed in at least one of claims 1 to 5, characterized in that the hydrolysis is carried out to a conversion of 60 to 100% by weight.

7. A process as claimed in at least one of claims 1 to 6, characterized in that a constant water content of 30 to 70% by weight is maintained in the reactor during the hydrolysis and an alcohol/water mixture is continuously removed by application of a vacuum of 20 to 60 ± 5 mbar.

8. A process as claimed in at least one of claims 1 to 6, characterized in that a water content of 0 to 20% by weight is adjusted in the reactor during the hydrolysis and an alcohol/water mixture is continuously removed by application of a vacuum of 20 to 60 ± 5 mbar.

9. A process as claimed in at least one of claims 1 to 6, characterized in that the hydrolysis is carried out in several stages without application of a vacuum, 50 to 75% by weight water being used in each stage.